

REMARKS

Claims 1-22 are pending. By this response, Claims 1, 11, 12, 21 and 22 are amended. Reconsideration and allowance based on the above amendments and following remarks are respectfully requested.

The Office Action rejects claims 1-3, 5-13 and 15-22 under 35 U.S.C. §102(e) as being anticipated by Lathrop (U.S. 6,288,743) and claims 4 and 14 under 35 U.S.C. §103(a) as being unpatentable over Lathrop. These rejections are respectfully traversed.

Claims 1 and 21

Claim 1 recites, *inter alia*, a storage device that stores in a storage medium, image data obtained at one of middle stages of image processing for processing signals outputted from an imaging device, the image data obtained at the middle stage being stored in said storage medium as final image data.

Claim 21 recites, *inter alia*, a method of processing image data obtained at one of middle stages of image processing for processing signals outputted from an imaging device; storing in a storage medium, the image data obtained at the middle stage as final image data; and storing, in the storage medium, information with the image data, the information indicating which middle stage the one is.

As recited in claims 1 and 21, image data is stored after each stage of middle staged of processing. The data is stored as final data which is kept in the storage medium.

In contrast to the teachings of the present invention, Lathrop teaches an electronic still camera that includes an image sensor for capturing an image and converting the image to a digital image data. The digital image data is processed through various image processing algorithms. The image processing algorithms can be divided into a number of sequential steps. Upon completion of the designated image data through one of the sequential steps, the image data is stored in a storage device 32. The image data is stored as "raw" data in the storage device. The "raw" data is then processed further incrementally and deleted upon completion of the processing of the "raw" data. See column 3, lines 50-67 to column 4, lines 1-37. Thus, the result of the previous step or the previous "raw" data is deleted when processing of the next step is finished.

Also, instead of dividing the image processing algorithms into a number of steps, Lathrop's system may divide the image itself into segments. Thus, a small segment of image can be processing allowing the processing to be performed quicker. When processing is interrupted due to a user capturing a new image, the processing data may be halted, but can resume based on any previously processed data stored in the memory. See column 4, lines 19-36.

Lathrop teaches obtaining "raw" data from each of the middle processing steps. Lathrop does not teach storing image data obtained at one of middle

stages of image processing ...the image data obtained at the middle stage being stored in said storage medium as final image data, as recited in claims 1 and 21. Instead, as discussed above, Lathrop's system processes the full image through a number of sequential steps or divides the image into segments and process the individual segments separately, where after each process "raw" data is created and then deleted based upon further processing of the data.

Therefore, Lathrop fails to teach each and every feature of claims 1 and 21 and required.

Claims 11 and 22

Claim 11 recites, *inter alia*, an imaging device; a designating device by which a user designates a desired processing stage out of an image processing sequence in which a plurality of processing stages are sequentially performed, for processing the signals outputted from said imaging device; a controlling device; and a storing device.

Claim 22 recites, *inter alia*, a method comprising designating, by a user, a desired processing stage out of an image processing sequence in which a plurality of processing steps are sequentially performed for processing signals outputted from an imaging device; obtaining image data at the stage designated; and storing the image data and information in a storage medium, the information indicating which processing stage the image data has been processed.

In both claims 11 and 22 a plurality of image processing stages are sequentially processed in a predetermined sequence. The processing performed up to a step determined by a user. The image data resulting from the processing is then stored indicating the contents of the processing stage.

As stated above, Lathrop in contrast, discloses a system that processes captured images and allows for the processing of the image to be halted after a series of steps and resumed or halted after a processing step using partial image data. Lathrop does not teach storing a result of the image data after a processing stage in a processing sequence. Further, Lathrop does not teach designating by a user, a desired processing stage. The methods of Lathrop perform all processing steps utilizing the “raw” data from those processing steps to obtain a finalized image.

Thus, Lathrop fails to teach each and every feature of claims 11 and 22 are required.

Claim 20

Further, dependent claim 20 recites, *inter alia*, a file naming device that adds a predetermined symbol to a file name of a file in which image data is stored according to a stage at which the image data has been obtained.

Within the processing of Lathrop, the image data is stored as a .TIFF file and then upon completion converted to a .JPEG file. The Office Action alleges that these specific data formats correspond to the claimed “file naming device

that adds a predetermined symbol to a file name in which the image data is stored, the predetermined symbol corresponding to the stage at which the image data has been processed.” .TIFF and .JPEG are format identifiers. They are not file names. Further, nowhere does Lathrop teach identifying each stage of processing based on whether the data format is .TIFF or .JPEG. The .TIFF data is the raw data that is processed through all processes. The .JPEG format is reserved for the image data upon completion of all processing. Thus, unless Lathrop only performs one processing step, which it does not, the use of the format identifies could not be considered a representation of the processing stage identifier, recited in claim 20.

In view of the above, applicants respectfully submit that independent claims 1, 11, 21 and 22 and dependent claims 2-10 and 12-19 are distinguishable over the cited references. Accordingly, reconsideration and withdrawal of the rejections are respectfully requested.

Conclusion

For at least these reasons, it is respectfully submitted that claims 1-19, 21 and 22 are distinguishable over the cited art. Favorable consideration and prompt allowance are earnestly solicited.

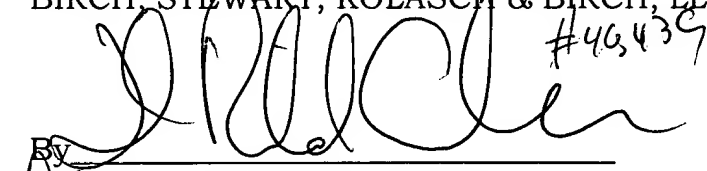
Appl. No. 09/840,182

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Chad J. Billings (Reg. No. 48,917) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

 #46,439
By _____
Michael K. Mutter, #29,680

MKM/ĈJB:
0879-0312P

P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000